UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/887,816	06/25/2001	Keith Hoene	10007759-1	7631

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EXAMINER
CHEN, SHIN HON

ART UNIT	PAPER NUMBER
2131	

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/887,816	HOENE ET AL.
	Examiner	**Art Unit**	
	Shin-Hon Chen	2131	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>01 August 2005</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,7,11,16,19,21 and 24-27* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,7,11,16,19,21 and 24-27* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>25 June 2001</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

        1.☐ Certified copies of the priority documents have been received.

        2.☐ Certified copies of the priority documents have been received in Application No. _____.

        3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-3, 7, 11, 16, 19, 21, and 24-27 have been examined.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3.   The term "tendency" in claims 19 and 21 is a relative term which renders the claim indefinite. The term "tendency" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The computers with tendency to be virus infected does not clearly set the scope of the claim.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a)   A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5.   Claim1-3, 11, 19, 24, and 25rejected under 35 U.S.C. 103(a) as being unpatentable over Chefalas et al. U.S. Pub. No. 20020116639 (hereinafter Chefalas) in view of Grosse U.S. Pat. No. 5205551 (hereinafter Grosse).

6.　　As per claim 1, and 11, Chefalas discloses a method of network computing: using a virus monitor of a server to identify a client computer that is infected with a virus or susceptible to a virus by verifying directly between the at least one client computer and the virus monitor of the server (Chefalas: [0012]: the VSN and VSC communicate directly), that the at least one client computer comprises at least one of: automatically isolating the virus-infected client computers and virus-susceptible client computers from the server and from a computing network connected to the server (Chefalas: [0012]). Chefalas further discloses wherein the using and isolating steps further comprise: detecting client computers that are infected with virus; and terminating a client-server connection for client computers that are infected with virus. Chefalas does not explicitly disclose detecting client computer that do not maintains an enabled virus protector and isolate client computer that have a disabled virus protector. However, Grosse discloses detecting client computers that do not have proper security configurations and detecting client computers that are not enabled for virus protection during an attempted client server connection and preventing connection for those misconfigured client computers, and take appropriate actions to correct the client information (Grosse: column 3 lines 6-34). It would have been obvious to one having ordinary skill in the art at the time of applicant's invention to detect client computers that do not have ability to protect themselves from virus attacks and quarantine them from other network devices. Therefore, it would have been obvious to one having ordinary skill in the art at the time of applicant's invention to combine the teachings of Grosse within the system of Chefalas because it prevents virus from spreading across entire network.

7.   As per claim 2, Chefalas discloses the method of claim 1. Chefalas further discloses

wherein the using step further comprises: scanning the client computer with a virus monitor of at

least one of the server and the client computer (Chefalas: [0012]).

8.   As per claim 3 and 14, Chefalas as modified discloses the method of claims 1 and 11

respectively. Chefalas as modified further discloses wherein the isolating step further comprises:

tracking a client identifier of the virus-infected and virus-susceptible client computers (Chefalas:

figures 4a and 4b and [0044]); and preventing a client-server connection and network

communications between the virus-infected client computers and virus-susceptible client

computer and the computing network (Chefalas: [0012]).

9.   As per claim 19, 24, and 25, claims 19, 24, and 25 encompass the same scope of

invention as that of claim 3. Therefore, claims 19, 24, and 25are rejected with the same reason as

claims 3 above and claim 7 below.

10.   Claims 7, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Chefalas in view of Stiles U.S. Pat. No. 6330608 (hereinafter Stiles) and further in view of

Grosse and further in view of Arnold et al. U.S. Pat. No. 5440723 (hereinafter Arnold) and

further in view of Hodges et al. U.S. Pat. No. 6269456 (hereinafter Hodges).

11.   As per claim 7, Chefalas discloses a method of maintaining a virus-controlled network

computing system comprising: booting at least one client computer to establish a client-server

connection with a server for limited access and to perform a scan by the at least one client

computer of the at least one client computer for a virus (Chefalas: [0012]); reporting the results

of the virus scan from the at least one client computer to the server (Chefalas: [0012]). Chefalas

does not explicitly disclose selectively permitting the client computer authorized access to the

server through the client-server connection when the virus scan report detects no viruses and

denying the client computer access to the server when a virus is detected or no valid virus report

is provided by the client computer. However, Stiles discloses checking whether the module

request access has virus infection and a set of criteria before it is being permitted to connect with

the system (Stiles: column 2 line 56 – column 3 line 40). It would have been obvious to one

having ordinary skill in the art at the time of applicant's invention to combine the teachings of

Stiles within the system of Chefalas because it increases the security of the network system by

making sure the client is not virus infected before the connection is established.

Chefalas as modified does not explicitly disclose including the server establishing the client-

server connection only when the at least one client computer includes a virus protection program

in an enabled mode. However, Grosse discloses detecting client computers that do not have

proper security configurations and detecting client computers that are not enabled for virus

protection during an attempted client server connection and preventing connection for those

misconfigured client computers, and take appropriate actions to correct the client information

(Grosse: column 3 lines 6-34). It would have been obvious to one having ordinary skill in the art

to allow the server to check whether the VSN residing on client computer is properly configured

and disallow connection between the client and the network if the client is misconfigured

because virus protection schemes can be combined to achieve greater security. Therefore, it

would have been obvious to one having ordinary skill in the art at the time of applicant's

invention to combine the teachings of Grosse within the combination of Chefalas-Stiles because

it prevents virus from spreading across entire network by checking whether the client computer

has the ability to protect itself from virus.

Chefalas as modified does not explicitly disclose wherein the terminating step further comprises:

querying the client periodically to determine if the virus protector of the client computer remains

enabled. However, Arnold discloses periodically monitor a data processing system for presence

of virus (Arnold: column 2 line 45 – column 3 line 12). It would have been obvious to one

having ordinary skill in the art at the time of applicant's invention to periodically monitor the

client computer and check if the client is virus-infected. Therefore, it would have been obvious

to one having ordinary skill in the art at the time of applicant's invention to combine the

teachings of Arnold within the combination of Chefalas-Stiles-Grosse because it increases the

security of the network system by ensuring that the virus to be detected as soon as possible if it

occurred.

Chefalas as modified does not explicitly disclose the method further comprising: terminating the

client-server connection if the virus definitions of the virus protector of the client computer have

not been updated within a specified date criteria of the server. However, Hodges discloses a

server checks whether the antivirus software on a client computer is up-to-date and updates

antivirus software on client computer if the version is old (Hodges: column 4 line 53 – column 5

line 48). It would have been obvious to one having ordinary skill in the art at the time of

applicant's invention to terminate client-server connection if the antivirus software on client

computer is not up-to-date. Therefore, it would have been obvious to one having ordinary skill in

the art at the time of applicant's invention to combine the teachings of Hodges within the

combination of Chefalas-Stiles-Grosse-Arnold because new viruses are being developed each

day and it is necessary for a computer system with newest virus definition to detect new virus in

order to ensure the security of network.

12.   As per claim 16, claim 16 encompasses the same scope of the invention as that of the

claim 7. Therefore, claim 16 is rejected for the same reason as the claim 7.

13.   As per claim 18, Chefalas as modified discloses the system of claim 16. Chefalas as

modified further discloses wherein the virus monitor of the server further comprises: a virus

protector for scanning the client computer and files written by the client computer (Chefalas:

[0012]).

14.   Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chefalas in view

of Grosse and further in view of Hodges.

15.   As per claim 21, Chefalas discloses a virus protector; a quarantine monitor configured for

preventing network communications to a server of a network originating from each client

computer that is virus-infected or that is virus susceptible and configured for tracking an identity

of each virus-infected client computer and each virus susceptible client computers (Chefalas:

[0012]). Chefalas does not explicitly disclose detecting if client computer is virus-infected or

virus susceptible by having at least one of a disabled virus protector and a virus definition set

that is not up-to-date. However, Grosse disclose detecting if security setting of a client computer

is misconfigured (Grosse: column 3 lines 6-34). It would have been obvious to one having

ordinary skill in the art at the time of applicant's invention to detect client computers that do not

have ability to protect themselves from virus attacks and quarantine them from other network

devices. Therefore, it would have been obvious to one having ordinary skill in the art at the time

of applicant's invention to combine the teachings of Grosse within the system of Chefalas

because it prevents virus from spreading across entire network. Chefalas as modified does not

explicitly disclose the server checks whether client's virus protector is up-to-date. However,

Hodges discloses that limitation (Hodges: column 4 line 53 – column 5 line 48). It would have

been obvious to one having ordinary skill in the art at the time of applicant's invention to

terminate client-server connection if the antivirus software on client computer is not up-to-date.

Therefore, it would have been obvious to one having ordinary skill in the art at the time of

applicant's invention to combine the teachings of Hodges within the combination of Chefalas-

Grosse because new viruses are being developed each day and it is necessary for a computer

system with newest virus definition to detect new virus in order to ensure the security of

network.

Response to Arguments

16.   Regarding applicant's remarks, applicant argues that the prior arts of record does not

explicitly disclose directly verifying between the client computer and the server. However,

Chefalas discloses the VSN and VSC communicate directly to achieve virus protection on client

computer while Grosse discloses determining whether the virus protection scheme has been properly configured at client computer. Therefore, the combination of Chefalas and Grosse discloses determining whether the virus protection software residing at client computer is configured properly and it would have been obvious to one having ordinary skill in the art to combine the two references because they are analogous in the art and combining the two references together would achieve greater virus protection capabilities. Furthermore, the term "directly verifying" can be given a broad interpretation such that any communication between the server and the client would be interpreted as "direct communication".

17.   Also regarding claim 1, applicant argues that Grosse reference does not disclose terminating or preventing a client-server connection based on verifying the status of a virus protector. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

18.   Furthermore, applicant argues that the reference does not disclose automatically terminating a client-server connection. However, Chefalas discloses sever the communication between the client and the network immediately after notification from VSN. Therefore, the term automatically does not differentiate the claimed invention and prior art because it does not define what automatically is based on.

19.   Regarding Hodges reference, applicant argues that the reference teaches away from the

invention. However, Hodges reference discloses server can check whether the virus protector

residing in client computer is up-to-date and perform necessary steps. Hodges reference is relied

upon in disclosing the server can check the status of the virus protector, not the actions

performed by server after the determination.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Shin-Hon Chen whose telephone number is (571) 272-3789. The

examiner can normally be reached on Monday through Friday 8:30am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

                                        Shin-Hon Chen
                                        Examiner
                                        Art Unit 2131

SC

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